

## **REMARKS**

This is a full and timely response to the outstanding Non-Final Office Action mailed September 25, 2007. Upon entry of the amendments in this response, claims 1 – 5, 10 – 12 and 21 remain pending, with claims 16 – 18 having been withdrawn. In particular, Applicants have amended claims 1, 10 and 21, and have cancelled claims 6 – 9, 13, 15, 19, 20 and 22 without prejudice, waiver, or disclaimer. Applicants have cancelled claims 6 – 9, 13, 15, 19, 20 and 22 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **Indication of Allowable Subject Matter**

The Office Action indicates that claim 14 may be allowable if re-written to overcome the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims. Although agreeing with the contention that claim 14 may be allowable subject matter, Applicants have not re-written claim 14 to be an independent form due to Applicants belief that claim 10, as amended, is in condition for allowance. In particular, Applicant has amended claim 10 to incorporate features previously recited in claim 13. Claim 14 originally depended from claim 13 and now depends from claim 10.

### **Objections to the Drawings**

The Office Action indicates that the drawings are objected to as failing to comply with 37 CFR 1.83(a). In particular, the Office Action indicates that the inverter recited in claim 14 is not shown in the drawings. In this regard, Applicants respectfully refer the Examiner's attention to FIG. 3, feature 310, which is an inverter. Inverter 310 is described in the specification at page 5, lines 16 through 23. Therefore, Applicants respectfully assert that the objection is improper and respectfully request that the objection be removed in that corrected drawings sheets to do not appear to be required.

### **In the Specification**

The Office Action indicates that the abstract of the disclosure is objected to. In this regard, Applicants submit herewith a replacement abstract on a separate sheet to be entered in the application.

### **Rejections Under 35 U.S.C. §112**

The Office Action indicates that claims 1 – 5, 10 – 15 and 21 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In this regard, Applicants have amended independent claims 1, 10 and 21, thereby rendering the present rejections moot. Notably, Applicants use direct antecedent basis throughout the claims in order to resolve any alleged ambiguity. Therefore, Applicants respectfully request that the rejections be removed.

## **Rejections Under 35 U.S.C. §102**

The Office Action indicates that claims 1 – 5, 10, 11, 13, 15 and 21 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by *Watts*. Applicants respectfully traverse the rejections.

In this regard, the Office Action indicates that *Watts* discloses a method and corresponding apparatus involving temperature-dependent throttling of a processor, as well as temperature-dependent operation of a fan. As set forth in detail below, Applicants respectfully assert that *Watts* is legally deficient for the purpose of anticipating or alternatively rendering obvious the limitations recited in Applicants' claims.

With respect to claim 1, claim 1 has been amended to recite:

1. A method for cooling a computer system, the computer system having a processor and a fan, said method comprising:  
determining a temperature threshold for operating the fan at greater than low speed;  
determining a temperature of the computer system; and  
***throttling the processor, responsive to a pulse with modulated signal, if the temperature determined corresponds to the temperature threshold for operating the fan at greater than low speed.***

(Emphasis added).

Applicants respectfully submit that *Watts* fails to disclose, teach, or reasonably suggest at least the claimed feature of “throttling the processor, responsive to a pulse with modulated signal, if the temperature determined corresponds to the temperature threshold for operating the fan at greater than low speed.” For at least this reason, Applicants submit that claim 1 is allowable over *Watts*, and respectfully request that claim 1 be placed in condition for allowance.

Because independent claim 1 is allowable, dependent claims 2 - 5 should also be allowable for at least the reason that these dependent claims contain all of the limitations of claim 1. Additionally, these claims recite other features that can serve as an independent basis for patentability.

With respect to claim 10, claim 10 has been amended to recite:

10. A computer system comprising:  
a processor;  
a fan operative to provide cooling airflow for reducing a temperature of the processor, the fan having a temperature threshold corresponding to operation of the fan at a speed greater than low speed; and  
a temperature-monitoring unit operative to determine a temperature of the computer system and to throttle the processor if the temperature corresponds to the temperature determined threshold for operating the fan at greater than low speed; and  
***wherein the temperature-monitoring unit throttles the processor by providing a signal corresponding to a pulse width modulation output of the temperature-monitoring unit to the processor.***

(Emphasis added).

Applicants respectfully submit that *Watts* fails to disclose, teach, or reasonably suggest at least the claimed feature of “wherein the temperature-monitoring unit throttles the processor by providing a signal corresponding to a pulse width modulation output of the temperature-monitoring unit to the processor.” For at least this reason, Applicants submit that claim 10 is allowable over *Watts*, and respectfully request that claim 10 be placed in condition for allowance.

Because independent claim 10 is allowable, dependent claims 11 - 15 should also be allowable for at least the reason that these dependent claims contain all of the limitations of claim 1. Additionally, these claims recite other features that can serve as an independent basis for patentability. Further, Applicants respectfully request reinstatement

of withdrawn claims 16 – 18, in that these claims are dependent claims that use claim 10 as a base claim. As such, upon reinstatement, claims 16 – 18 should also be in condition for allowance.

With respect to claim 21, claim 21 has been amended to recite:

21. A computer system comprising:  
a processor;  
a fan for cooling the processor;  
means for determining a temperature threshold for operating the fan at greater than low speed;  
means for determining a temperature of the computer system; and  
***means for throttling the processor, responsive to a pulse with modulated signal, if the temperature determined corresponds to the temperature threshold for operating the fan at greater than low speed.***

(Emphasis added).

Applicants respectfully submit that *Watts* fails to disclose, teach, or reasonably suggest at least the claimed feature of “means for throttling the processor, responsive to a pulse with modulated signal, if the temperature determined corresponds to the temperature threshold for operating the fan at greater than low speed.” For at least this reason, Applicants submit that claim 21 is allowable over *Watts*, and respectfully request that claim 21 be placed in condition for allowance.

### **Rejections Under 35 U.S.C. §103**

The Office Action indicates that claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over *Watts*. Applicants respectfully traverse this rejection. In this regard, claim 12 is a dependent claim that incorporates the limitations of claim 10, for which it depends. As set forth in detail above, Applicants respectfully assert that claim

10 is in condition for allowance, therefore, claim 12 is believed to be in condition for allowance for at least this reason.

### **CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Additionally, any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



---

**M. Paul Qualey, Jr., Reg. No. 43,024**

**THOMAS, KAYDEN,  
HORSTEMEYER & RISLEY, L.L.P.**  
Suite 1750  
100 Galleria Parkway N.W.  
Atlanta, Georgia 30339  
(770) 933-9500